

AMENDMENTS TO THE CLAIMS

Please amend claims 31 and 40, and cancel claim 32 such that the status of the claims is as follows:

1-30. (Canceled)

31. (Currently Amended) A method of stimulating the endogenous defense mechanisms of a perishable harvested crop product against microbial attack for a period of effective defense comprising the steps of:

- a) arranging perishable harvested crop products in a matrix within a substantially closed environment;
- b) suppressing the expression of signal transduction genes of the perishable harvested crop products by exposing the perishable harvested crop products to a gaseous mixture of air and ozone at a prescribed concentration for a period of exposure, the prescribed ozone concentration being a selected concentration in the range of around fifty to five hundred parts per billion (ppb) by volume in air; and
- c) removing the harvested crop products from the substantially closed environment after the period of exposure;

wherein the period of effective defense against microbial attack resulting from suppressing the expression of the signal transduction genes of the perishable harvested

crop products ozone exposure during the period of exposure is between two and five hundred hours after the period of exposure.

32. (Cancelled)
33. (Previously Presented) A method as claimed in Claim 31, wherein the period of effective defense is between two and eight hours.
34. (Previously Presented) A method as claimed in Claim 31, wherein the prescribed concentration is in the range of around fifty to around two hundred ppb by volume.
35. (Previously Presented) A method as claimed in Claim 34, wherein the prescribed concentration is in the range of around fifty to around one hundred ppb by volume.
36. (Previously Presented) A method according to Claim 31, wherein the prescribed concentration is fifty or one hundred or two hundred or five hundred ppb by volume.
37. (Previously Presented) A method according to Claim 31, comprising the further step of maintaining the relative humidity in the enclosed environment at around ninety five percent.
38. (Previously Presented) A method according to Claim 31, comprising the further step of maintaining the temperature in the enclosed environment at four to thirteen degrees C.
39. (Previously Presented) A method according to Claim 31, wherein the substantially closed environment consists of a crop store, a warehouse, or a freight transport container.

40. (Withdrawn - Currently Amended) Apparatus for performing the method of Claim ~~4~~ 31, comprising an ozone generator, an ozone sensor and a controller, wherein generated ozone is released into the environment until the prescribed ozone concentration is reached, and wherein the ozone sensor measures the concentration of ozone in the environment, and when the measured concentration of ozone falls below the prescribed ozone concentration the controller commands the ozone generator to release ozone into the environment, so as to maintain continuously the ozone concentration in the environment substantially at the prescribed concentration.
41. (Withdrawn) Apparatus according to Claim 40, wherein ozone is released into the environment by the ozone generator via a plurality of inlets.
42. (Withdrawn) Apparatus according to Claim 40, comprising a plurality of ozone sensors.
43. (Withdrawn) Apparatus according to Claim 40, wherein the controller includes computer software, the software including a model representative of the of gaseous fluid behavior in the environment, and wherein ozone is released into the environment according to the concentration of ozone measured by the or each sensor, and the gaseous fluid behavior model.